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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,287

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Ying Liu

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425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER

CHOWDHURY, AFROZA Y

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,287	Applicant(s) LIU ET AL.	
	Examiner AFROZA Y. CHOWDHURY	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/6/2008, 7/9/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on **May 6th, 2008** has been entered. Claims 1-4 and 6-25 are currently pending. Applicants' argument addressed herein below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, “... **writing start area is substantially smaller than said handwriting input area; wherein the processing device is configured to provide a visual indication of said writing start area on said display screen ...**” is not clear. Are “**writing start area is substantially smaller than said handwriting input area**” and “**visual indication of said writing start area**” correspond to the same “**writing start area**”?

The specification describes, “... the writing start area is considerably smaller that and has a fixed location within the handwriting input area ...” in [0042] and “alternatively, the writing start area may have an adaptive location ... to adjust the

Art Unit: 2629

adaptive location depending on a current cursor position” in [0043]. It is not understood that the “writing start area” of claim 1 and 17 refers to which one of these two types of area. Besides [0070] refers to “280” as “handwriting start area” as shown in fig. 1. Thus, how the “writing start area” is defined is not clear.

Claim 17 is rejected the same as claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6-12, and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Matsuura et al.** (US Pub. 2004/0196266) in view of **Ebrahimi** (US Patent 6,424,743).

As to claim 1, Matsuura et al. discloses an apparatus for handwriting recognition, the apparatus comprising:

a touch-sensitive display screen (fig. 1(2)) providing a handwriting input area capable of detecting a handwritten user input ((fig.1(3), [0020] – [0021], [0042] – [0044]); and

a processing device (fig. 3(18)) configured to interpret the handwritten user input as a symbol from a plurality of predefined symbols ([0025], [0035], [0038]),

wherein the handwriting input area (fig. 1(2)) includes a writing start area (fig. 1(241-244)),

wherein said writing start area (fig. 1(241-244)) is substantially smaller than said handwriting input area (fig. 1(2)); and

wherein the processing device (fig. 3(18)) is configured to provide a visual indication of said writing start area on said display screen (fig. 1(241-244)), as best understood (interpreting the “writing start area” is the area that is smaller than said handwriting input area as mentioned above).

Matsuura et al. does not explicitly teach a display device where the processing device is configured to interpret the user input as a symbol only if the user input starts within said writing start area and ends anywhere within the handwriting area.

Ebrahimi teaches a display device where the processing device is configured to interpret the user input as a symbol only if the user input starts within said writing start area (figs. 2-5(abc, 123, .?,)) and ends anywhere within the handwriting area (figs. 2-5(the area includes abc, 123, .?., 44, 46)).

Therefore, it is obvious to one skill in the art at the time of the invention was made to include some useful feature of Ebrahimi's handwriting recognition interface into the character input apparatus of Matsuura et al. to make a handwriting recognition apparatus where the processing device is configured to interpret the user input as a

Art Unit: 2629

symbol only if the user input starts within said writing start area and ends anywhere within the handwriting area in order to provide the user more flexibility.

As to claims 2 and 18, Matsuura et al. teaches an apparatus having a user interface in which the display screen is included (fig.1), wherein the processing device (fig. 3(18)) is configured to interpret the user input as a user interface control operation and not as a symbol if the user input starts outside of said writing start area ([0028] – [0029]).

As to claims 3 and 19, Matsuura et al. discloses an apparatus wherein a processing device (fig. 3(18)) is configured to interpret the user input as a user interface control operation and not as a symbol if a pen event within said writing start area is not followed by a pen move event within a prescribed time period ([0045] – [0046]).

As to claim 4, Ebrahimi teaches an apparatus wherein said writing start area (fig. 1(241-244)) has a fixed location within said handwriting input area (fig. 1(2)).

As to claims 6, 7, and 20, Matsuura et al. teaches an apparatus where a processing device (fig. 3(18)) is configured to adjust the location of writing start area depending on a current cursor position (fig. 1(22)).

As to claims 8 and 9, Matsuura et al. teaches an apparatus wherein the handwriting area is formed by a majority of the display screen's available presentation area (fig. 1).

As to claims 10, 11, 21 and 22, Matsuura et al. discloses an apparatus wherein said user input including at least one pen stroke and said processing device is configured to display, on said display screen, a graphical trace representing said at least one pen stroke prior to the interpretation thereof (fig. 1, [0028]).

As to claims 12 and 23, Matsuura et al. teaches an apparatus wherein plurality of predefined symbols includes a symbol set selected from the group consisting of: Latin characters, upper case characters, lower case characters, Arabic numerals, punctuation symbols, Cyrillic characters, Chinese characters, Japanese Kanji symbols, Japanese Hiragana characters and Japanese Katakana characters, and user-defined symbols (fig. 1, [0025], [0038]).

As to claim 15, Matsuura et al. teaches a mobile terminal for a mobile telecommunications system ([0016], [0083]).

As to claim 16, Matsuura et al. teaches an apparatus in the form of a portable/personal digital assistant ([0083]).

Claim 17 is rejected the same as claim 1 above.

6. Claims 13, 14, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Matsuura et al.** (US Pub. 2004/0196266) in view of **Ebrahimi** (US Patent 6,424,743) and in further view of **Dutta et al.** (US Patent 6,724,370).

As to claims 13 and 24, Matsuura et al. (as modified by Ebrahimi) discloses a character input apparatus with handwriting recognition capability (fig. 1, in Matsuura et al.).

Matsuura et al. (as modified by Ebrahimi) does not teach an apparatus where a plurality of predefined symbols including a first symbol set, and a second symbol set, and a writing start area comprising a first subarea and a second subarea wherein a processing device is configured to interpret the user input as a symbol from said first symbol set if the user input starts within said first subarea, and as a symbol from said second symbol set if the user input starts within said second subarea.

Dutta et al. teaches an apparatus wherein a plurality of predefined symbols including a first symbol set (fig. 3-5(abc)), and a second symbol set (fig. 3-5(123)), and a writing start area comprising a first subarea (fig. 3-5(abc)) and a second subarea (fig. 3-5(123)) wherein a processing device is configured to interpret the user input as a symbol from said first symbol set if the user input starts within said first subarea (fig. 3-5(abc)), and as a symbol from said second symbol set if the user input starts within said second subarea (fig. 3-5(123)).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the idea of having subarea of set of symbols of Dutta et al. into the character input apparatus of Matsuura et al. (as modified by Ebrahimi) to make a handwriting recognition device for user's convenient.

As to claims 14 and 25, Matsuura et al. (as modified by Ebrahimi) teaches a character input apparatus with handwriting recognition capability (fig. 1, in Matsuura et al.).

Matsuura et al. (as modified by Ebrahimi) does not teach an apparatus where a plurality of predetermined symbols comprising a third symbol set, and a writing start area comprising a third subarea, wherein a processing device is configured to interpret the user input as a symbol from third symbol set if the user input starts within third subarea.

Dutta et al. teaches an apparatus wherein a plurality of predetermined symbols comprising a third symbol set, and a writing start area comprising a third subarea, wherein a processing device is configured to interpret the user input as a symbol from third symbol set if the user input starts within third subarea (fig. 3-5).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the idea of having subarea of set of symbols of Dutta et al. into the character input apparatus of Matsuura et al. (as modified by Ebrahimi) to make a handwriting recognition device to use more symbols.

Response to Arguments

7. Applicant's arguments with respect to claims 1-4 and 6-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFROZA Y. CHOWDHURY whose telephone number is (571)270-1543. The examiner can normally be reached on 7:30-5:00 EST, 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC
7/22/2008
/Bipin Shalwala/

Application/Control Number: 10/817,287

Page 10

Art Unit: 2629

Supervisory Patent Examiner, Art Unit 2629